

MACHINE SERVICE BULLETIN #125

SUBJECTS:

- A New style 1001 spring attached to studs on 12-52 and 12-54.
- B New style lock for clear-out mechanism C & E models, superseding that shown in Machine Service Bulletin #112.
- C New style friction mechanism for drum 9-5 superseding that shown in Machine Service Bulletin #112.
- D Improved hammer spring 9-25 $\frac{1}{4}$ replaces 986.

DATE: January 15, 1932

TO ALL OFFICES:

- A New style spring 1001 is now attached to studs on assemblies 12-52 and 12-54, in all KAS, KAA, C & E models to improve the spring action. This change can be made to machines in the field by removing old style spring 1001 together with spacing rod 1281, and assemblies 12-52 and 12-54.

Scrap old style 1001 and 1281. Rivet carefully and securely to the inner faces of 12-52 and 12-54 spring stud 1277 $\frac{1}{4}$ in the holes previously used for the purpose of attaching old style spring 1001.

Reassemble 12-52 and 12-54. Assemble new style spacing rod 1281xl into new style spring 1001 and attach spring to studs 1277 $\frac{1}{4}$. This installation will not change the adjustment of the carriage shift as explained on plate #21 of Machine Service Bulletin #40.

- B This change includes an improved part 921 $\frac{1}{4}$ xl shown as 921 $\frac{1}{4}$ in Machine Service Bulletin #112, which is assembled to the 921xl designated as 9-34 with a new style 1171xl shown as 1171 and is secured in place with screw 3003 and lock washer 69 with lock nut 2077.

To install this mechanism remove the old style lock 9-34 as outlined in Machine Service Bulletin #112 (return same to the factory). Assemble the new style lock before attaching it to the motor bracket 9-90. Place blank 924 $\frac{1}{4}$ xl on top of 921xl with undercut of blank to control the cross over lever for lower dials 9-12xl. Insert the new style eccentric adjustment stud 1171xl into hole of blank 921 $\frac{1}{4}$ xl. Insert screw 3003 and secure with lock washer #69 and lock nut 2077 under shelf of blank 921xl temporarily.

Assemble and adjust the new style lock mechanism as explained and illustrated in Machine Service Bulletin #112, using 953 $\frac{1}{4}$ screw in place of 947. The purpose of a longer screw (953 $\frac{1}{4}$) is to control the clearout lever from sliding off the drum. Tighten screw 3003 securely and lock with nut 2077 without changing the adjustment of 921 $\frac{1}{4}$ x1.

NOTE: It is important that the new style clearing lock 921 $\frac{1}{4}$ x1 be properly adjusted to obtain satisfactory results of the clearout mechanism.

- C A change has been made to improve the friction which is applied on drum 9-5 for lock for the clearout mechanism.

To install the improved material, remove motor bracket 9-90 and its plate 1520. Remove old style friction unit with shaft 1552 and scrap nuts 945, spring 1585, collar 1536 1/8, fibre washer 920 and shaft 946.

Assemble new style friction unit as follows: Assemble 1536x1 on shoulder of shaft 946x1 shown as 946, Machine Service Bulletin #112. Assemble fibre washer 920x1 designated as 920 against face of gear 1536x1. Assemble 1552 $\frac{1}{4}$ into drum 9-5. Assemble this unit on shaft 946x1 with 1552 $\frac{1}{4}$ against 920x1.

NOTE: 9-5 must be assembled in the position shown in Machine Service Bulletin #112A and the corners of the slot designated as A, must be broken, top and bottom, before assembling to 1552 $\frac{1}{4}$.

Assemble one collar 945x1 shown as 945, on shaft 946x1 with its large diameter against drum 9-5.

Assemble new style spring 1585 on shaft 946x1. Assemble another collar 945x1 on shaft 946x1 with its small diameter located in hole of spring 1585. Insert retaining ring 85 in groove on shaft and clamp it in place.

Assemble gear 1536 $\frac{1}{4}$ on hub of the right hand end of 946x1. Insert unit into bracket 775C. Reassemble plate 1520. Reassemble motor bracket 9-90 to machine. To test the functioning of this mechanism consult Machine Service Bulletin #112.

NOTE: These improved parts have been installed in all machines recently manufactured; therefore, check present mechanism carefully before dismantling.

- D To improve the action of 9-24 hammer and hammer link, the present 986 hammer spring has been replaced with a new style spring and connections 9-25 $\frac{1}{4}$. (See figure 5, plate #10, Machine Service Bulletin #108).

To install 9-25 $\frac{1}{4}$ remove complete assembly 9-25 (plate 3), remove spring 986 and stud 1163. Scribe a horizontal center line

between hole from which the 1163 was removed and the hole in the right hand corner of the blank. Scribe a vertical line $5/8$ " to left of center of right hand corner hole and center punch intersection and drill a hole with #35 drill and countersink opposite side of hole.

Assemble stud 1163 in this hole and rivet it securely in place. Assemble 9-25 $\frac{1}{4}$ between studs 1162 and 1163. Re-assemble unit.

NOTE: Before reassembling keyboard to base of machine, check all adjustments carefully.

Any of the improved material referred to in this Bulletin may be requisitioned from Orange at no charge.

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- 3 -

between hole from which the 1163 was removed and the hole in
the right hand corner of the blank. Drill a vertical line
3/8" to left of center of right hand corner hole and center
punch intersection and drill a hole with #33 drill and down-
turning opposite side of hole.

Assemble stud 1163 in this hole and rivet it securely in
place. Assemble 8-334 between studs 1163 and 1165. Re-
assemble unit.

NOTE: Before reassembling keyboard to base of machine,
check all adjustments carefully.

Any of the improved material referred to in this Bulletin
may be replenished from Orange at no charge.

[Signature]
General Service Manager

ENC: 11